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PTO/SB/01 (10-00)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63) <input checked="" type="checkbox"/> Declaration Submitted with Initial Filing OR <input type="checkbox"/> Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)	Attorney Docket Number	56.0470
	First Named Inventor	William R. McIntire
	COMPLETE IF KNOWN	
	Application Number	/
	Filing Date	Filed Herewith
	Group Art Unit	
	Examiner Name	

As a below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

VALVE APPARATUS

(Title of the Invention)

the specification of which

☒ is attached hereto

OR

☐ was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)	<input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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DECLARATION — Utility or Design Patent Application

Direct all correspondence to:

☒ Customer Number
or Bar Code Label

27452

OR ☐

Correspondence address below

Name

Address

Address

City

State

ZIP

Country

Telephone

281-285-4490

Fax

281-285-8569

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR :

☐ A petition has been filed for this unsigned inventor

Given Name

William R.

Family Name

McIntire

(first and middle [if any])

or Surname

Inventor's
Signature

William R McIntire

Date 19 DEC 00

Residence: City

Sugar Land

State

TX

Country

USA

Citizenship

USA

Mailing Address

6903 Shady Lane

Mailing Address

City

Sugar Land

State

TX

ZIP

77479

Country

USA

NAME OF SECOND INVENTOR:

☐ A petition has been filed for this unsigned inventor

Given Name

Hau N.

Family Name

Pham

(first and middle [if any])

or Surname

Inventor's
Signature

Hau N Pham

Date 12/20/2000

Residence: City

Houston

State

TX

Country

US

Citizenship

USA

Mailing Address

2500 Woodland Park Drive, Apt. N305

Mailing Address

City

Houston

State

TX

ZIP

77077

Country

USA

☐ Additional inventors are being named on the ____ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.

Please type a plus sign (+) inside this box → ☐

PTO/SB/02A (11-00)
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DECLARATION

ADDITIONAL INVENTOR(S)
Supplemental Sheet
Page 1 of 1

Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Joseph M.		Hubenschmidt	
Inventor's Signature <i>Joseph M. Hubenschmidt</i>		Date <i>12/20/00</i>	
Residence: City	Sugar Land	State	TX
Country	USA	Citizenship	USA
Mailing Address 1907 Concho River Ct.			
Mailing Address			
City	Sugar Land	State	TX
ZIP	77478	Country	USA
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Mark E.		Upton	
Inventor's Signature <i>[Signature]</i>		Date <i>12-19-00</i>	
Residence: City	Richmond	State	TX
Country	USA	Citizenship	USA
Mailing Address 2707 Country Place Drive			
Mailing Address			
City	Richmond	State	TX
ZIP	77469	Country	USA
Name of Additional Joint Inventor, if any:		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature		Date	
Residence: City		State	
Country		Citizenship	
Mailing Address			
Mailing Address			
City		State	
ZIP		Country	

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UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

MARCH 23, 2001

PTAS

SCHLUMBERGER TECHNOLOGY CORPORATION
MARYANN JAMELIN
IP DEPT., WELL STIMULATION
110 SCHLUMBERGER DRIVE, MD1
SUGAR LAND, TEXAS 77478T



101579837A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/21/2000

REEL/FRAME: 011413/0932
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
MCINTIRE, WILLIAM R.

DOC DATE: 12/19/2000

ASSIGNOR:
PHAM, HAU N.

DOC DATE: 12/20/2000

ASSIGNOR:
HUBENSCHMIDT, JOSEPH M.

DOC DATE: 12/20/2000

ASSIGNOR:
UPTON, MARK E.

DOC DATE: 12/20/2000

ASSIGNEE:
SCHLUMBERGER TECHNOLOGY
CORPORATION
110 SCHLUMBERGER DRIVE
SUGAR LAND, TEXAS 77478

SERIAL NUMBER: 09747398
PATENT NUMBER:

FILING DATE: 12/21/2000
ISSUE DATE:

011413/0932 PAGE 2

SHARON BROOKS, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

MAD 12/21/00

01-12-2001

REC



101579837

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. NAME OF CONVEYING PARTY(IES):

William R. McIntire
Hau N. Pham
Joseph M. Hubenschmidt
Mark E. Upton

No additional names attached

2. NAME AND ADDRESS OF RECEIVING PARTY(IES):

Schlumberger Technology Corporation
110 Schlumberger Drive
Sugar Land, Texas 77478

No additional names & addresses attached

U.S. PTO
09/747398
12/21/00

3. NATURE OF CONVEYANCE:

ASSIGNMENT

EXECUTION DATE: December 19, 2000, December 20, 2000, December 20, 2000 and December 19, 2000

4. APPLICATION NUMBER(S) OR PATENT NUMBER(S):

If this document is being filed with a new application, the execution date of the application is: December 19, 2000, December . 20, 2000, December 20, 2000 and December 19, 2000

A. PATENT APPLICATION NO.(s) Filed Herewith

B. PATENT NO.(s)

NO ADDITIONAL NUMBERS ATTACHED

5. NAME AND ADDRESS FOR CORRESPONDENCE:

Schlumberger Technology Corporation
IP Dept., Well Stimulation
110 Schlumberger Drive, MD1
Sugar Land, Texas 77478

6. TOTAL NUMBER OF APPLNS. & PATENTS INVOLVED 1.

7. TOTAL FEE (37 CF4.3.41) \$40.00

CHARGE TO DEPOSIT ACCOUNT

8. DEPOSIT ACCOUNT NO. 04-1579(56.0470)
(a duplicate of this page is attached)

9. STATEMENT AND SIGNATURE.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Maryam Beni-Jamal 12/21/2000
(Signature) (Date)

Total number of pages including cover sheet, attachments and document:

01/10/2001 DMSUYEN 00000110 041579 09747398

01 FC:581

40.00 CH

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ASSIGNMENT OF APPLICATION

Docket Number (Optional)

56.0470

Whereas, I, William R. McIntire of Schlumberger Technology Corporation, hereafter referred to as applicant, have invented certain new and useful improvements in _____

VALVE APPARATUS

☐ for which an application for a United States Patent was filed on _____, Application Number _____/_____.

☒ for which an application for a United States Patent was executed on 19 DEC 00, and

Whereas, Schlumberger Technology Corporation of Sugar Land, Texas USA herein referred to

"assignee" whose mailing address is 110 Schlumberger Drive, MD1 is desirous of acquiring the entire right, title and interest in the same;

Now, therefore, in consideration of the sum of One dollars (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I, the applicant, by these presents do sell, assign and transfer unto said assignee the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to any and all Patents which may be granted therefor in the United States, I hereby authorize and request the Commissioner of Patents and Trademarks to issue said United States Patent to said assignee, of the entire right, title, and interest in and to the same, for his sole use and behoof; and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.

Executed this 19th day of DECEMBER, 2000,
at Sugar Land, Texas USA

William R McIntire

(Signature)

State of Texas) SS:County of Ft. Bend)Before me personally appeared said William R. McIntireand acknowledged the foregoing instrument to be his free act and deed this 19th day of December, 2000.

Seal



TRICIA E. VAN HOOSER
MY COMMISSION EXPIRES

Tricia E. van Hooser

(Notary Public)

Burden Hour Statement: This form is estimated to take 6.1 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner of Patents and Trademarks, Washington, DC 20231.

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ASSIGNMENT OF APPLICATION

Docket Number (Optional)
56.0470

Whereas, I, Hau N. Pham of Schlumberger Technology Corporation, hereafter referred to as applicant, have invented certain new and useful improvements in VALVE APPARATUS

☐ for which an application for a United States Patent was filed on _____, Application Number _____/_____,
☒ for which an application for a United States Patent was executed on 12/20/2000, and

Whereas, Schlumberger Technology Corporation of Sugar Land, Texas USA herein referred to "assignee" whose mailing address is 110 Schlumberger Drive, MD1 is desirous of acquiring the entire right, title and interest in the same;

Now, therefore, in consideration of the sum of One dollars (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I, the applicant, by these presents do sell, assign and transfer unto said assignee the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to any and all Patents which may be granted therefor in the United States, I hereby authorize and request the Commissioner of Patents and Trademarks to issue said United States Patent to said assignee, of the entire right, title, and interest in and to the same, for his sole use and behoof; and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.

Executed this 20th day of DECEMBER, 2000,
 at Sugar Land, Texas USA

Hau N. Pham
 (Signature)

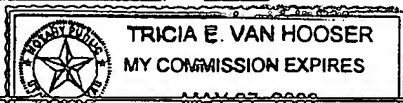
State of Texas) SS:

County of Ft. Bend)

Before me personally appeared said Hau N. Pham

and acknowledged the foregoing instrument to be his free act and deed this 20th day of December, 2000.

Seal



Tricia E. van Hooser
 (Notary Public)

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ASSIGNMENT OF APPLICATION

Docket Number (Optional)

56.0470

Whereas, I, Joseph M. Hubenschmidt of Schlumberger Technology Corporation, hereafter referred to as applicant, have invented certain new and useful improvements in _____

VALVE APPARATUS

☐ for which an application for a United States Patent was filed on _____, Application Number _____/_____.

☒ for which an application for a United States Patent was executed on 12/20/00, and

Whereas, Schlumberger Technology Corporation of Sugar Land, Texas USA herein referred to "assignee" whose mailing address is 110 Schlumberger Drive, MD1 is desirous of acquiring the entire right, title and interest in the same;

Now, therefore, in consideration of the sum of One dollars (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I, the applicant, by these presents do sell, assign and transfer unto said assignee the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to any and all Patents which may be granted therefor in the United States, I hereby authorize and request the Commissioner of Patents and Trademarks to issue said United States Patent to said assignee, of the entire right, title, and interest in and to the same, for his sole use and behoof; and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.

Executed this 20th day of DECEMBER, 2000,

at Sugar Land, Texas USA

State of Texas) SS:

County of Ft. Bend)

Before me personally appeared said Joseph M. Hubenschmidt

and acknowledged the foregoing instrument to be his free act and deed this 20th day of December, 2000.

Seal



TRICIA E. VAN HOOSER
MY COMMISSION EXPIRES

(Signature)

(Notary Public)

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ASSIGNMENT OF APPLICATION

Docket Number (Optional)
56.0470

Whereas, I, Mark E. Upton of Schlumberger Technology Corporation, hereafter referred to as applicant, have invented certain new and useful improvements in _____

VALVE APPARATUS

☐ for which an application for a United States Patent was filed on _____, Application Number _____/_____.

☒ for which an application for a United States Patent was executed on December 19, 2000 and

Whereas, Schlumberger Technology Corporation of Sugar Land, Texas USA herein referred to "assignee" whose mailing address is 110 Schlumberger Drive, MD1 is desirous of acquiring the entire right, title and interest in the same;

Now, therefore, in consideration of the sum of One dollars (\$ 1.00), the receipt whereof is acknowledged, and other good and valuable consideration, I, the applicant, by these presents do sell, assign and transfer unto said assignee the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to any and all Patents which may be granted therefor in the United States, I hereby authorize and request the Commissioner of Patents and Trademarks to issue said United States Patent to said assignee, of the entire right, title, and interest in and to the same, for his sole use and behoof; and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.

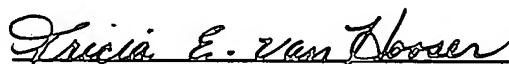
Executed this 19th day of December, 2000,
at Sugar Land, Texas USA



(Signature)

State of Texas) SS:County of Ft. Bend)Before me personally appeared said Mark E. Uptonand acknowledged the foregoing instrument to be his free act and deed this 19th
day of December, 2000.

Seal

(Notary Public)

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